Mike Stafford
Harris County Attorney

June 7, 2006

Via Facsimile (512) 239-3311 and
First Class Mail

Ms. LaDonna Castanuela
Office of Chief Clerk, MC-105
Texas Commission on Environmental Quality
P. O. Box 13087
Austin, Texas 78711-3087

Re: Application by Southern Crushed Concrete, Inc., to Change the Location of a Concrete Crushing Facility in Harris County; SOAH Docket No. 582-05-1040; TCEQ Docket No. 2004-0839-AIR.

Dear Ms. Castanuela:

Enclosed please find an original and 11 copies of **Harris County's Reply to ED's Response to OGC Letter** that was filed on June 7, 2006 in the matter referenced above. Copies of this filing were provided to the Administrative Law Judge and all parties by fax and first class mail on that date.

If you have any questions or comments, please call me at 713-755-8284. Thank you for your time and consideration.

Sincerely,

MIKE STAFFORD
Harris County Attorney

Snehal R. Patel
Attorney for Harris County

MAS/SRP/db
Enclosures

SOAH DOCKET NO. 582-05-1040
TCEQ DOCKET NO. 2004-0839-AIR

APPLICATION BY SOUTHERN CRUSHED CONCRETE, INC., TO CHANGE THE LOCATION OF A CONCRETE CRUSHING FACILITY IN HARRIS COUNTY	§ § § § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

HARRIS COUNTY'S REPLY TO ED'S RESPONSE TO OGC LETTER

COMES NOW, Harris County and files its Reply to the Executive Director's (ED) Response to OGC Letter in the above-referenced case. Harris County would respectfully show the following:

I. INTRODUCTION

On May 10, 2006 the Office of General Council (OGC) of the Texas Commission on Environmental Quality (TCEQ) requested that the ED file a brief to address the six specific issues outlined below regarding the Applicant's (Southern Crushed Concrete or SCC) emissions calculations and modeling. The OGC specifically asked the ED to review the record, determine whether the six issues were handled consistent with agency practice and/or guidelines, and whether the manner in which they were handled was appropriate in this case.

On May 26, 2006 the ED filed its response to the OGC letter of May 10, 2006. The ED devotes much of the first page arguing a well-known fact that the ED did not participate as a party to this case. The OGC letter clearly acknowledged this by citing 30 TAC § 80.257 which states that "for permit hearings in which the executive director has not participated as a party, the commission or general counsel may request in writing that the executive director file briefs concerning legal or policy issues." A review of the remaining document indicates that the entire record[1] was not reviewed as requested by

[1] "Record" in a contested case includes: each pleading, motion, and intermediate ruling, evidence received or considered; a statement of matters officially noticed; questions and offers of proofs, objections, and rulings on them; proposed findings and exceptions; each decision, opinion, or report by the officer presiding at the hearing; and all staff memoranda or data submitted to or considered by the hearing officer or members of the agency who are involved in making the transcript. Tex. Gov't Code § 2001.060.

the OGC, and that only a cursory review of the six issues is provided. The ED stated in its response, that it will respond to the OCG letter "in the context of the applicable law and/or policy;"[2] however, nothing in the law precludes the ED from following the OGC's direction to not only review the record and determine if the six issues were handled in a manner that is consistent with agency practice and/or guidelines, but also to determine whether it was appropriate in this case.

The second part of the question regarding applicability of agency practice and/or guidelines to the case in question is also of importance because any administrative agency that seems to be applying its agency practice and/or practice as one of general applicability "for these types of matters" as the ED states in its discussion of every issue, is venturing into the territory of being a rule which of course, would be in violation of the law.[3] The agency practice and/or guidelines discussed in the ED's Response are obviously not rules and should not be applied as a matter of general applicability for these types of matters. The ED fails in this regard to provide a meaningful brief to the OGC as pertaining to the proposed SCC facility. Harris County also agrees with the replies submitted by City of Houston, CASCC, and TPSC and incorporates them by reference. A more detailed analysis of each issue follows in the next section.

II. SIX QUESTIONS RELATED TO SCC'S EMISSIONS CALCULATIONS AND MODELING

A. Whether Applicant's Use of the AP-42 Unpaved Road Factor is Consistent with Agency Practice and/or Guidelines, and Whether it was Appropriate in this Case.

Even though an AP-42 paved road factor exists and SCC represents that their haul roads will be "paved," the ED argues that the unpaved road factor is consistent with agency practice and/or guidelines for these types of matter. Relying on the draft Concrete Batch Plants document, the ED provides only one reason as a basis for using the unpaved road factor. The ED states that the unpaved road factor should be used because it includes a parameter for a percentage of silt content of road surface material and that by

---

[2] ED Response at 1.

[3] Tex. Water Code § 5.103(c), Tex. Gov't Code § 2001.003(6)(A)-(C).

changing the equation's parameters for silt content to the paved road value, the equation should provide a good representation of the paved road emission rate.[4]

This response is puzzling because the ED's rationale concerning silt content is not mentioned anywhere in the record, including the draft Concrete Batch Plant Guidance document. Specifically, there is nothing in the draft guidance document that "provides an applicant could use the unpaved road equation for paved roads by changing the equation's parameters for silt content to the paved road value."[5] The draft guidance includes the unpaved road factor equation, and the only concession that is made for paved roads is that control factors are provided for the paving of unpaved roads.[6] That is, if the road happens to be paved, the draft document provides the use of the unpaved road factor with the use of a control factor (e.g. paving only, paving with watering etc.). Of course, the ED provides no relevant discussion of the control factors and its use by SCC in calculating its emissions and is non-responsive to the question posed by the Commission. That is an important point to consider when SCC seeks to take 95% credit for watering roads that are not paved with asphalt and 99% for wet-sweeping and vacuuming its main road. Harris County draws the Commission's attention to its Closing Arguments and Reply.

Moreover, with this case, a review of SCC's road emissions calculations indicates that even SCC did not change the equation parameters for silt content to the paved road value as the ED recommends as being consistent with agency practice and/or guidelines. The percentage it used for silt content in its haul road emissions calculations is 10%.[7] The basis for this 10% percent is the silt content percentage provided for stone quarrying and processing for plant roads using the unpaved road factor.[8]

It is also not clear how the silt content value can be changed to the "paved road value" that the ED mentions. As provided in the AP-42 factor for unpaved roads, emissions from unpaved roads "vary directly with the fraction of silt (particles smaller

---

[4] ED Response at 2.
[5] *Id.* A-Ex. 30.
[6] A-Ex. 30 at 46.
[7] A-Ex. 25 at Table 1-7.
[8] A-Ex. 26 at Table 13.2.2-1 – Typical Silt Content Values for Surface Material on Industrial Unpaved Roads.

than 75 microns in diameter) in the road surface matter."[9] Silt Content, as discussed in the AP-42 unpaved road factor guidance document, is determined by "measuring the proportion of loose dry surface dust that passes a 200-mesh screen, using the ASTM-C-136 method."[10] The parameter that is the closest to the unpaved road equation's silt content in the paved road equation is the "silt loading" parameter.[11] But silt content as referred in the unpaved road factor is different from silt loading in the paved road factor. For one thing, silt loading "refers to the mass of silt-sized material (equal to or less than 75 micrometers [μm] in physical diameter) per unit area of the travel surface."[12] The reference that is made is of dust that can be collected by broom sweeping or vacuuming of the traveled portion of the road which is different than silt content for unpaved roads.[13] Also, the two parameters are measured differently – one in grams per micrometers and another in percentage. How does the ED propose to change the units of the silt loading parameter of grams per micrometers to match the required units of the silt content in percentage? And then, another problematic factor is that the two parameters are applied completely differently in the respective unpaved and paved road equations and how would that difference be accounted for?[14] At the end of the day, does it make sense to jump through these hoops when a perfectly acceptable AP-42 paved road factor equation exists for types of industrial paved roads and activities contemplated by SCC?

B. Whether Applicant's Exclusion of Road Emissions from its Short-Term Modeling Runs is Consistent with Agency Practice and/or Guidelines, and Whether it was Appropriate in this Case.[15]

Contrary to the ED's position, there is no longstanding TCEQ policy that haul road emissions should not be included in short-term modeling runs. In the two known

---

[9] A-Ex. 26 at 13.2.2-1.
[10] A-Ex. 26 at 13.2.2-1.
[11] P-Ex. 2.
[12] P-Ex. 2 at 13.2.1-2.
[13] *Id.*
[14] The silt content parameter in the unpaved road equation is divided by a factor of 12 and raised to a power of either 0.9 or 0.7 (depending upon the particle size of the emissions to be calculated). A-Ex. 26 at 13.2.2-4 -5. The silt loading parameter in the paved road equation is divided by a factor of 2 and raised by a power of 0.65. P-Ex. 2 at 13.2.1-6.
[15] In SCC's rebuttal modeling, short-term road emissions were included but SCC used selective parameters which did not take into consideration the paved road factor or appropriate control factors. These

cases where this issue has been brought outside of the ED's arena and before an ALJ and TCEQ commissioners involving Ingram and Frontier Materials, short-term road emissions have been included and found to be reliable.[16]

The Executive Director relies on the Steib memo to claim that not modeling roads on a short-term basis is TCEQ policy. This memorandum is a two-page memorandum signed by Mr. Steib, former director of the Air Permits Division dated February 25, 2000.[17] This two-page memorandum is not a rule or guidance issued by the current two commissioners of the TCEQ. In the memorandum, TCEQ staff states that they disagreed with the ALJ in the Ingram hearing who required some method of quantification to be used and accepted extensive evidence on how emissions should be calculated and staff managed to provide a best estimate of emissions which was accepted by the ALJ.[18] Staff does concur that there is a method for calculating short-term road emissions which apparently was capable of reaching a standard that an independent ALJ found to be reliable. Yet, the memorandum does not cite any scientific studies or supporting rationale but simply makes a conclusory statement that since there is no reliable calculation methods for shorter time periods (24-hour, 3-hour, 1-hour), emissions from road dust should not be calculated on short-term basis.[19] Harris County submits that the broad assertions of staff on short-term road emissions are without a reasoned and reliable scientific basis.

The ED also cites the Air Quality Modeling Guidelines. However, even these guidelines merely state, "in general, do not include road emissions for permit modeling analysis for short-term averaging periods."[20] In Section 6.6.2, the guidance even provides steps that must be followed if road emissions are modeled.[21] The ED also quotes the guidelines stating that the modeling process is based on the assumption that emissions are continuous, and that road emissions are determined by the type of and

---

discussions are thoroughly covered in Harris County's closing arguments and Harris County directs the Commission's attention to those arguments.

[16] Tr. at 587, lines 14-15; A-Ex. 32 at 2.

[17] A-Ex. 32.

[18] *Id.*

[19] *Id.*

[20] A-Ex. 23 at Section 6.6.1, page 58 (Emphasis added).

[21] *Id.*

amount of traffic, which is usually not continuous.[22] However, once again, these are statements of general applicability and no attempt is made to apply the guidance to the facts relevant to this proceeding.

The record provides site-specific information submitted by SCC that indicates that this site is expected to have an average 25 trucks an hour arriving at the site to deposit or pick up loads.[23] Twenty-five trucks per hour equates to about one truck entering the site every two and a half minutes. Each truck will have to slowly travel down an approximately 600-foot access road, drop off or collect its load, and then exit the site.[24] It is logical to think that this will not occur within two and a half minutes which means that the second truck will be arriving before the first truck has time to leave. As this will occur all day long, it is unreasonable to consider the roadway emissions non-continuous.

The agency is also inconsistent in its position that the modeling process is based on the assumption that emissions are continuous. Yet, TCEQ requires the modeling of other emissions on short-term basis that occur intermittently such as emissions from unloading material onto raw material stockpile, loading product onto product haul trucks, and emissions from stockpiles.[25] Therein lies a discrepancy in the ED's argument.

The ED also emphasizes the application of best management practices (BMP) to minimize the creation of road dust and prevent nuisance conditions in lieu of modeling. The draft Rock Crushing Plants Guidance document states that implementation of BMP for roads is Best Available Control Technology (BACT).[26] The argument that just because BACT is required means that modeling should not be conducted is spurious. In fact, it is TCEQ policy that all sources apply BACT and even with that, modeling is required for those sources. In conclusion, there is simply no scientific reason or long-standing agency practice and/or guidelines to exclude roads from short-term modeling.

C. Whether Applicant's Use of the Paved Road Control Factor for Milled Asphalt Roads is Consistent with Agency Practice and/or Guidelines, and Whether it was Appropriate in this Case.

---

[22] Emphasis added.
[23] Tr. at 70, lines 20-24.
[24] Tr. At 612, lines 13-24. According to the scale provided in the maps, distance appears to be about 600 feet. A-Ex. 13 and 14.
[25] P-Ex. 11 at 18, lines 528-545; Tr. at 19, lines 547-560.
[26] A-Ex. 24 at 2.

The ED makes the general statement that the use of the paved road factor for milled asphalt road is consistent with agency practice and/or guidelines provided by APD for these types of matter. The ED cites the draft Concrete Batch Plant Guidance as support for this statement. However, nothing in this draft guidance addresses the use of milled asphalt road specifically. The draft guidance speaks generally to paved roads.[27] The proposed permit provision requires, "[p]lant roads shall be paved with a cohesive hard surface which can be cleaned by sweeping or washing."[28] Again, whether a milled asphalt road forms a cohesive hard surface which can be cleaned by sweeping or washing required a closer review of the record by the ED. Obviously, a milled asphalt road is different than a road paved with asphalt; however, the ED is non-responsive to this question and merely punts the issue. In a circular argument, the ED seems to be saying that if SCC is representing that it meets the permit requirement, it would be consistent to use the paved road factor. Of course, this very issue is not of general applicability but a question of fact concerning these proposed operations and whether the paved road factor is appropriate to use where the roads are made of milled asphalt roads. The ED fails to provide any insight in that regard. The only governmental expert witness that provided testimony on this subject under oath was Ms. Guynn, Harris County Pollution Control senior level investigator, who based on her past fifteen years of experience with investigating facilities of this kind, stated that "milled material is not a hard bonded substance. It's a substance that will break up under – under heavy – heavy truck traffic and tires . . . And it – it's not conducive to being cleaned."[29] SCC expert witness, Mr. Miller, testified that "the roads covered with milled asphalt would look like a country gravel road."[30] Mr. Miller further states that nothing is poured over the milled asphalt to give it cohesiveness[31] and that instead it is done with only compaction.[32]

As stated above while the milled asphalt surface is hard enough to wash, it is not conducive to sweeping as it is missing the cohesive element of the asphalt. Testimony

---

[27] A-Ex. 30 at 46.
[28] A-Ex. 8 at 2.
[29] Tr. at 463, lines 3-25; at 464, lines 1-10.
[30] Tr. at 698, line 15.
[31] Emphasis added.
[32] Tr. at 713, lines 1-3.

given by SCC expert witness, Mr. Miller, during the trial indicated that he even understood that the milled asphalt road could be watered, but would not be vacuumed.[33] Ms. Guynn indicated that in her expert opinion the milled asphalt road would violate the permit requirement that the road must be paved with a cohesive hard surface which can be cleaned by sweeping or washing.[34] In the absence of the ED not providing any analysis of the record, the testimony of Harris County senior level investigator, Ms. Guynn, who regularly enforces these types of air quality permits, should be given appropriate weight.

In conclusion, the draft guidance allows an applicant to claim 95% control efficiency for a paved road that is watered; however, claiming such a large credit for a road that does not measure up to a proper asphalt road ends up with an inaccurate calculation of road emissions and demonstrates a major flaw in the calculations. These real issues are not discussed by the ED at all.

D. Whether Applicant's Failure to Take into Account Stockpile Heights[35] When Modeling Stockpile Emissions is Consistent with Agency Practice and/or Guidelines, and Whether it was Appropriate in this Case.

Here, the ED makes a fatal error in describing air emissions from stockpiles by comparing them to emissions from stacks. While it is true that "the taller the source of emissions, the better dispersion the contaminant receives and that is, taller stacks get better dispersion and consequently reduced concentrations than shorter ones."[36] However, this is assuming that emissions are occurring from a fixed elevated point. For example, exhaust from a stack is from a fixed point[37] from which emissions spread from the opening of the stack. That is, there are no emissions along the length of the stack. With stockpiles, there are three sources of emissions associated with stockpiles: 1) loading of materials onto the stockpile; 2) wind erosion off of the stockpile, and 3) from

---

[33] Tr. at 133, lines 13-25; at 134, lines 1-24.
[34] Tr. at 463, lines 3-25; at 464, lines 1-10.
[35] SCC assumed a stockpile height of 25 feet in their modeling which is different than calculations of stockpile emissions rates where height is not a factor. SCC makes the same argument as the ED that increasing the stockpile height would result in greater dispersion of pollutants and result in lower predicted impacts. A-Ex. 52 at 24, lines 21-27.
[36] ED Response at 3.
[37] A-Ex. 23 at xxi.

traffic in and around the stockpile.[38] Emissions can occur at any point on a stockpile especially the raw material stockpiles of the size contemplated by SCC where trucks are traveling up along the road on the stockpile itself and tipping material onto the stockpile, and where, in a different area of the stockpile, front-loaders are scooping materials from the stockpile onto the crusher.[39]

Moreover, the raw material stockpiles are not even typical cone-shaped stockpiles.[40] Even Mr. Miller described it as a "big kidney-shaped pile."[41] A stockpile, in essence, is a volume source of emissions with particulate matter coming off of various portions of the stockpile at any given time. Emissions from the undisturbed portions of the stockpile due to wind erosion or truck agitation, for example, are not point sources of emissions in which height is an effective measure to reduce ground level concentrations of pollutants. It is an even greater fallacy to state as the ED does, that increasing stockpile heights in the model would result in greater dispersion with a decrease in the ground level concentration at the property line. As common sense would dictate, the bigger the stockpile, the more surface area will be exposed to the wind and agitation from other sources such as trucks and front-loaders, the more emissions will be produced from ground level up to the top. It is simply not logical to compare a tall thin stack to a large pile of crushed concrete or product stockpiles and to state that a greater height would result in a decrease in the ground level concentration at the property line.

Moreover, even the guidance in the TCEQ's Air Quality Modeling Guidelines for determining non-point volume sources state that the parameters needed to calculate volume emissions rates are the emissions rate, the release height, and the initial horizontal and vertical dimensions of the volume.[42] Thus, the ED's assertion that the exclusion of stockpile heights when modeling stockpile emissions is consistent with agency practice and/or guidelines and that modeling stockpiles while disregarding height would be the most conservative approach goes against the TCEQ's own Air Quality Modeling Guidelines. The ED's argument would mean that a stockpile with the

---

[38] Tr. at 163, lines 25; at 164, lines 1-7.
[39] Tr. at 707-711. Mr. Miller explains in the detail all the activity expected at the SCC raw material stockpiles from ground level up to the top.
[40] *See* HC-Ex. 18 for a picture of a typical raw material stockpile.
[41] Tr. at 707, line 7.
[42] A-Ex. 23 at 55 (Emphasis added).

dimensions of 100 feet long by 20 feet wide by 100 feet high would have the same emissions as a stockpile that is 100 feet long by 20 feet wide, by 200 feet high and that goes against all common sense.

Another issue is the calculation of stockpile emission rates. Prior to actually modeling stockpile emissions, the emission rates are calculated which are plugged into the air model to determine maximum off-property concentrations of pollutants to be emitted. Emissions rates calculations are very important because if those numbers are flawed, then the entire modeling analysis is erroneous. Here, as the ED discussed, the draft Rock Crushing Plants Guidance document does not take into account stockpile height when estimating stockpile emission rates, and that's a fatal flaw. The ED failed to discuss why it continues to encourage the use the 1985 AP-42 - 8.19.1 factor which calculates emissions based on the footprint of the storage pile.[43] This formula does not include a variable for production or throughput rates, or the volume size of a stockpile. The formula for calculating emission rates only looks at the stockpile on a two-dimensional scale (i.e. the foot print) even though Mr. Prince (SCC's modeling expert) agreed that "emissions from stockpiles are [from] loading of material to the stockpile, wind erosion, and traffic in and around the stockpiles."[44] As Mr. Prince testified, if you doubled throughput, it would mean more truck traffic in and around the stockpiles and more loading of raw materials onto stockpiles;[45] yet the emissions rate for stockpile emissions remains the same.[46] In the real world, all of this agitation would amount to more stockpile emissions;[47] but these are not represented in the stockpile emissions calculated by SCC.

The ED states that increasing the stockpile heights would result in a decrease in the ground-level concentrations at the property line and yet that line of reasoning is inconsistent with the agency's own Air Quality Standard Permit for Temporary Rock Crushers which actually includes a permit provision that states that "raw material and product stockpile height shall not exceed 45 feet."[48] This provision is contrary to the

---

[43] P-Ex. 11 at 10, 280-282.
[44] Tr. at 163, line 25; at 164, lines 1-7. *See* Tr. at 164-165.
[45] Tr. at 167, lines 11-20; at 168, lines 1-8.
[46] *See* A-Ex. 8 and HC-Ex. 22.
[47] Tr. at 167, lines 11-20; at 168, lines 1-8.
[48] HC-Ex. 16; Tr. at 172, lines 9-11.

ED's position that seems to be dismissive of taking into consideration stockpile height in estimating stockpile emissions because according to the ED, higher stockpiles would get better dispersion and reduced off-property impacts. Obviously, the TCEQ felt there was merit in considering stockpile height as a protective measure against emissions when a stockpile is high, and even went to the point of adding a limit on stockpiles. In responses to competing comments that the height restriction was too restrictive or it was too high, TCEQ stated:

> No changes have been made to the standard permit in response to these comments. The protectiveness review indicates that the conditions of this standard permit, including stockpile height, are protective and will help ensure compliance with state and federal regulations. The commission has no statutory authority to reduce or increase stockpile heights based on any consideration other than to protect public health and welfare and ensure compliance with applicable regulations. However, local governmental entities may impose more restrictive limits based on land use consideration such as aesthetics.[49]

Even Harris County senior level inspector Ms. Guynn based on her experience investigating nuisance complaints under 30 Tex. Admin. Code § 101.4 provided testimony that elevated stockpiles can cause nuisance conditions further away because particulates from elevated source tend to attain more distance and affect just residences or other facilities or locations further."[50]

Once again, like the other issues, the ED has failed to give this issue the thorough consideration that it deserved. The record more than amply covers the issues specific to the SCC facility as related to stockpiles but one key aspect that should not be lost is that modeling is meant to provide an estimate of potential "real world" emissions rather than simply repeating modeling mantras such as the taller the stockpiles, the greater the dispersion therefore the smaller the impacts. A real effort needs to be made by the ED to see if it makes sense when applying it to a particular source.

E. Whether Applicant's Use of the "Bissonnet" Monitor to Provide Background Concentrations for $PM_{2.5}$ is Consistent with Agency Practice and/or Guidelines, and Whether it was Appropriate in this Case.

[49] Tr. at 171, lines 9-20; HC-Ex. 26 at 16 (Emphasis added).
[50] Tr. at 442, lines 8-25; at 443, lines 1-8.

The ED was clearly asked to determine if the Applicant's use of the "Bissonnet" monitor" to provide background concentrations for $PM_{2.5}$ was appropriate. This question is specifically about the selection of the Bissonnet monitor, and does not implicate the wholly separate issue of evaluating $PM_{2.5}$ and is outside the scope of the OGC letter.

In terms of the Bissonnet monitor issue, the ED engages in a perfunctory discussion of a 1998 TCEQ memorandum and states that, "if the 'Bissonnet' monitor is closest to the proposed site, and collecting information on the contaminant of interest, it would be the most desirable."[51] Then without any further evaluation of the record, the ED jumps to the conclusion, "[t]herefore, use of the Bissonnet monitor is consistent with agency practice and/or guidelines."[52] From these brief statements, it is not clear how the ED arrived at the conclusion that the use of the Bissonnet monitor is consistent with agency practice and/or guidelines.

The fact is the 1998 TCEQ memorandum written by a team leader specifically states that the goal is to use the most conservative and readily available concentration in the permit review process.[53] The idea is not to focus on the nearest representative monitor as the ED argues, but instead the memorandum states that "[r]epresentativeness is determined by "reviewing monitor location, quality of data, and currentness of the data."[54] Nowhere in the memorandum does it state that the closest monitor must be used. Even SCC's expert Mr. Prince agreed that the memorandum does not specifically state that the closest monitor must be used.[55] Mr. Prince also replied, "I believe you can, yes" that per the TCEQ memo, you can use monitoring data from a nearby site or a comparable site.[56] The memorandum states that existing monitors within 10 km can also be used but goes on to state that determining background concentrations includes various levels of refinements.[57]

The 1998 memorandum offers guidance in selecting a representative monitor, and a dose of common sense needs to be applied because after all, the point of background

---

[51] ED Response at 4.
[52] *Id.*
[53] A-Ex. 33.
[54] *Id.*
[55] Tr. at 578, lines 5-6.
[56] Tr. at 570, lines 23-25; at 571, lines 1-5.
[57] A-Ex. 33.

concentrations is to locate a site that is at least representative of the proposed site. The SCC site is across the street from a pipe manufacturing facility which would have significant truck traffic and is located near two major highways (610 and 288) with Beltway 8 to the south of the facility with high level of vehicular traffic, and is directly south of downtown.[58] Similarly, the Mae Drive monitor is located 8 to 10 miles away in an area with 610 to the west, and Interstate 10 is about 900 feet away.[59] In comparison, the Bissonnet site is located in a park and in a residential neighborhood and not near any major highways. Since motor vehicles are a source of combustion and emit fine particulate;[60] the representativeness of a monitor should be evaluated given the factors outlined in the TCEQ memo such as monitor location; yet the ED seems to be stating that such factors do not matter.

Looking at it a different way, the point that the Bissonnet monitor is not representative of the proposed site and would lead to an under-prediction of background concentrations of $PM_{2.5}$ at the proposed site, is made apparent by the fact that SCC's equally acceptable modeling results B,[61] that included the nearby Croquet monitor site, more closely mirror Mr. Hunt's (Protestants' expert modeling witness) background concentrations and that in comparison, as one would expect in a residential area, the background concentrations using only the Bissonnet site are much lower. For Mr. Prince, the difference in choosing different monitors resulted in 10.3 micrograms per cubic meters in background concentrations of $PM_{2.5}$ using two years of data from the nearby Crockett site coupled with one year of Bissonnet site to using the Bissonnet site resulting in an increase to 12.7 micrograms per cubic meter in background concentrations of $PM_{2.5}$.[62] These issues are discussed in detail in Harris County's closing arguments and response to arguments and are also acknowledged in the PFD.[63]

---

[58] P-Ex. 11 at 24, lines 711-721.
[59] Tr. at 560, lines 14-18; at 561, lines 4-6.
[60] HC-Ex. 4 at 2-6.
[61] Tr. at 222-224; at 225, line 1.
[62] Tr. at 222-224; at 225, line 1. *See* Harris County's Closing Arguments and Reply for full discussion on this.
[63] PFD at 23. Footnote 41.

The second issue that is not within the scope of the OGC letter but the ED decides to comment on relates to use of $PM_{2.5}$. This also needs further explanation. The modeling guidance provides that, "Compliance with the pre-1997 form of the PM_{10} NAAQS will be the surrogate for compliance with the 1997 form of the PM_{10} NAAQS and the new $PM_{2.5}$ until the EPA publishes new technical review procedures."[64] This is in reference to an EPA memorandum that states, "in view of the significant technical difficulties that now exist . . . EPA believes that PM_{10} may be used as a surrogate for $PM_{2.5}$ in meeting NSR requirements.[65] The difficulties EPA references existed as of 1997 which is the date of this memorandum.[66] On page 2, the memorandum speaks of the lack of $PM_{2.5}$ monitoring sites as one of the key reasons that EPA believes that it is administratively impracticable at this time to require sources and state permitting authorities to attempt to implement PSD permitting for $PM_{2.5}$.[67] But in 2006, that is not a problem. As Dr. Fraiser testified, there is a better understanding of $PM_{2.5}$ since that time and there are more $PM_{2.5}$ monitoring stations (this is also demonstrated by the different $PM_{2.5}$ monitoring stations Mr. Hunt reviewed in the Houston area alone). EPA scientists also noted that since the last review in 1997, an extensive $PM_{2.5}$ monitoring network has been deployed and operated in conjunction with state, local, and tribal agencies, and with instrument manufacturers.[68] With better data available, Mr. Hunt and Mr. Prince have provided more specific $PM_{2.5}$ emissions that do not simply rely on a crude approach of accepting PM_{10} emissions as a surrogate for $PM_{2.5}$ emissions, and such efforts should be recognized as applied to this specific case and reviewed in that light by the ED.

F. Whether Applicant's Inclusion in the Screen Modeling of the Empty Areas Between Various Aspects of the Rock Crushing Operations is Consistent with Agency Practice and/or Guidelines, and Whether it was Appropriate in this Case.

The ED fails to provide any depth on the question of whether including the empty areas between various aspects of the rock crushing operations are consistent with agency

---

[64] A-Ex. 23 at 17.
[65] A-Ex. 34 at 1 (Emphasis added).
[66] *Id.* at 3.
[67] *Id.* at 2 (Emphasis added).
[68] HC-Ex. 4 at 5-18.

practice and/or guidelines. The ED makes the arguments that "the empty areas are typically attributed to front-end loader operations between crushing equipment and stockpiles."[69] It is not clear what the basis for this statement is. TCEQ's own Air Quality Modeling Guidelines state that, "[r]egulatory modeling should reflect the actual characteristics of the proposed or existing emission points;" yet there is nothing in the record that the volume source was based on actual characteristics.[70] This modeling guideline also mentions nothing about empty areas being required to be included for front-end loader operations between crushing equipment and stockpiles.

The ED assumes that the Zimmerman model included stockpile emissions because it states that "the stockpile emission factor includes the use of the front-end loader; therefore, the "empty areas" can be a contributor to the overall plant emissions due to front-end loader operation which have been included in the stockpile emissions. The basic problem with this argument is that the Zimmerman screen modeling did not even include a stockpile emissions rate. Mr. Zimmerman added a total of 1.22 pounds per hour of emissions only from aggregate handling, crushing operations, and screening operations as found in SCC's MAERT table[71] and only those emissions were spread out in a box comprising 1.8 million cubic feet (200 feet by 200 feet by 45 feet).[72] The stockpile emission rate is included as an EPN in the MAERT but it is not included in the Zimmerman modeling; thus the empty areas cannot account for emissions from front-end loader operations from the stockpiles since the emissions are not even included in the model. Harris County's Closing Arguments had identified this as one of the errors in the Zimmerman modeling.

The ED also misses the question about the appropriateness of a volume source that is 1.8 million cubic feet and whether it is representative of the emissions points at a crushing facility as outlined in the modeling guideline. Using Mr. Prince's dimensions that were provided to him by SCC as representative of crushing facilities for aggregate handling, crushing operations and screening operations as provided in Table 1-9 of

---

[69] ED Response at 4.
[70] A-Ex. 23 at 11.
[71] This was multiplied by a factor of 0.6 to account for fugitive emissions. A-Ex. 8. The 0.6 factor also deserves a careful review because as discussed in Harris County's Closing Arguments and Reply, there is no scientific basis for the "fudge" factor.
[72] Tr. at 182, lines 2-20.

Applicant's Exhibit 25,[73] the total dimensions for these operations only amounted to 3,439 cubic feet.[74] Now, this included dimensions for all emissions points at a concrete crushing facility except roads and stockpile emissions (Emission Point Numbers (EPNs) 1-7 were added together which included jaw crusher, cone crusher, screener, unloading/load-out frag. rock, loading-crushed rock, pile formation, and convey transfer).[75]

The key question that remains unanswered by the ED is even if one were to draw a circle around the 3,439 cubic feet to include everything, one wonders since there is such a big difference between 1.8 million cubic feet and 3,439 cubic feet, would a representative volume source for a concrete crushing facility actually amount to 1.8 million cubic feet? This is an especially important question because given an emission rate, the larger the volume source, the smaller the predicted impact.[76] Thus, if one is retained to demonstrate that the 100-foot distance requirement can be protective, arguably it would behoove that person to select a large volume source because it would in essence predict a smaller impact.

Demonstrating this point, Mr. Hunt's screen modeling predicted that even emissions from only one source by itself with a volume size of 1,000 cubic feet would exceed the state standards at 100 feet.[77] This demonstrates a critical flaw in the screen modeling because it seems to be saying that one source by itself measuring 1,000 cubic feet only may exceed standards but if you combine this source and all other sources into a large volume source, air quality standards will not be exceeded. As argued in Harris County Closing Arguments and Reply, this is counter-intuitive to the real world because common sense says that one source by itself is likely to have lower amount of emissions

---

[73] A-Ex. 25 includes dimensions with different emission points by height, width, length and so forth at Table 1-9. Tr. at 179, lines 12-19. Mr. Prince testifies that numbers are [in]accurate representations of dimensions found at the Bellfort site. *Id.* (note the transcript reads "inaccurate" when it should read accurate within the context of that question and answered again correctly at Tr. at 227, lines 14-17). Mr. Prince provides that those dimensions are only based on his visit to the site and conversations with Mr. Miller. Tr. at 227, lines 12-13.

[74] Tr. at 183-186.

[75] *Id.* A-Ex. 25.

[76] Tr. at 181, lines 14-25; Tr. at 182, line 1.

[77] Tr. at 239, lines 5-10. Mr. Prince has calculated his pile formation at 3 feet by 3 feet by 25 feet. Tr. at 238, lines 5-15.

than when that source is combined with other sources and presumably greater predicted impacts.

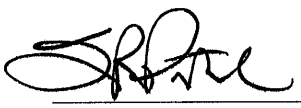
The ED's response was once again disappointing in that it failed to provide a proper objective assessment of the Zimmerman Modeling. This is an important issue because this flawed modeling was used to demonstrate that the 100-foot distance requirement from the crusher could be met and demonstrate compliance with air quality standards.[78]

III. CONCLUSION

In a nutshell, the ED's submittal is non-responsive to the questions asked by OGC. Harris County requests that the Commissioners ask the ED to review the entire record and submit a detailed and responsive reply to the six questions that takes into account the facts in this case, prior to any decision being made on the proposed permit. A careful review of the record will show that SCC has failed to meet its burden of proof under each one of the six issues referred to SOAH, including this issue related to emissions calculations and modeling.

Respectfully submitted,

MIKE STAFFORD
Harris County Attorney



Snehal R. Patel
Assistant County Attorney
State Bar No. 24002732
1019 Congress, 15th Floor
Houston, Texas 77002
(713) 755-8284
FAX (713) 755-2680

ATTORNEY FOR HARRIS COUNTY

[78] A-Ex. 6; A-Ex. 18.

CERTIFICATE OF SERVICE
SOAH DOCKET NO. 582-05-1040
TCEQ DOCKET NO. 2004-0839-AIR

I, Snehal R. Patel, do hereby certify that on June 7, 2006, true and correct copies of the foregoing "Harris County's Reply to ED's Response to OGC Letter" in the above-docketed proceeding were sent via facsimile and First Class Mail to the persons listed on the attached mailing list.

Snehal R. Patel
Harris County Attorney's Office

MAILING LIST
SOUTHERN CRUSHED CONCRETE, INC.
SOAH DOCKET NO. 582-05-1040
TCEQ Docket No. 2004-0839-AIR

Hon. Craig R. Bennett
State Office of Administrative Hearings
P.O. Box 13025
Austin, Texas 78711-3025
(512) 475-4993
(512) 475-4994 FAX

PRESIDING ADMINISTRATIVE LAW JUDGE

LaDonna Castanuela
TCEQ Office of the Chief Clerk
MC-105
P.O. Box 13087
Austin, Texas 78711-3087
(512) 239-3300
(512) 239-3311 FAX

DOCKET CLERK

Brad Alan Patterson, Staff Attorney
Texas Commission on Environmental Quality
MC-175
P.O. Box 13087
Austin, Texas 78711-3087
(512) 239-0600
(512) 239-3434 FAX
(512) 239-0606 FAX

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Mary Alice C. McKaughan
Office of the Public Interest Counsel
Texas Commission on Environmental Quality
MC-103
P.O. Box 13087
Austin, Texas 78711-3087

OFFICE OF THE PUBLIC INTEREST COUNSEL, TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Kyle Lucas
TCEQ Alternative Dispute Resolution Program
MC-222
P.O. Box 13087
Austin, Texas 78711-3087
(512) 239-0687
(512) 239-4015 FAX

Derek R. McDonald
Baker Botts LLP
1500 San Jacinto Center
98 San Jacinto Blvd.
Austin, Texas 78701
(512) 322-2500
(512) 322-8342 FAX

SOUTHERN CRUSHED CONCRETE, INC.

Martina Cartwright, Attorney
3100 Cleburne Avenue
Houston, Texas 77004
(713) 313-1019
(713) 313-1191 FAX

CITIZENS AGAINST SOUTHERN CRUSHED CONCRETE AND TEXAS PIPE AND SUPPLY COMPANY, LTD.

Iona Givens
Sr. Assistant City Attorney
City of Houston
900 Bagby
Houston, Texas 77002
(713) 247-1152
(713) 247-1017 FAX

CITY OF HOUSTON

*Hon. Sheila Jackson Lee
1919 Smith Street, Suite 1180
Houston, Texas 77002
(713) 655-0050
(713) 655-1612 FAX

***COURTESY COPY**

Jody Henneke
TCEQ Office of Public Assistance
MC-108
P.O. Box 13087
Austin, Texas 78711-3087
(512) 239-4000
(512) 239-4007 FAX